Healthcare services in the U.K.

PRIVATE SECTOR AND THE NEW CONSULTANT CONTRACT: KEY STATISTICS AND TRENDS*

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Summary

The private hospital sector in the UK is small compared with the National Health Service (NHS) provisions. In per capita termsFrom a per capita perspective, there were 20 private acute beds per 100.000 population in 1997/1998 compared with 219 per 100.000 in the acute NHS. The value of private acute hospitals and clinics supply in 1999 for acute medical/surgical inpatient and outpatient labour was £1.548 millions.

The private health care market is complex and quite concentrated. The three largest medical insurance companies are Bupa, PPP and WPA. Insurers have focused their cost containment efforts on reducing provider prices charged by private hospital.

The demand volume for private healthcare has always been associated with dissatisfaction due to public supply provided by the NHS. There are some 14.000 private practice consultants in 15 medical and surgical specialities in the UK. The estimated average net private income per NHS consultant in 2000 was £44.000.

Within the acute sector, privately-owned hospitals compete with each other for business in the same way as private insurance companies do for large, stable insured populations. In this competition, the private sector has focused on reducing margin rate strategies. We consider unlikely that an aggressive reaction of the private sector will outbid the NHS for consultant time.

Key Words: Healthcare private sector, health insurance market, consultants payments, NHS consultants

Resumen

El sector de los hospitales privados en el Reino Unido es pequeño comparado con la provisión ofertada por el National Health Service (NHS). En términos per cápita, en el bienio 1997-1998, había 20 camas hospitalarias de agudos por 100.000 habitantes, comparado con las 219 camas de agudos por 100.000 habitantes ofertadas por el NHS. El monto económico por la atención médica y quirúrgica realizada por el sector privado en 1999 fue de 1.548 millones de libras.

El mercado privado de la asistencia sanitaria es complejo y muy concentrado. Las tres mayores compañías de seguros médicos son Bupa, PPP y WPA. Las aseguradoras han centrado sus esfuerzos de reducción de costes en rebajar las tarifas que cobran los hospitales privados.

El nivel de demanda de asistencia médica privada se ha asociado siempre con la insatisfacción provocada por la provisión pública de asistencia sanitaria del NHS. Existen aproximadamente 14.000 médicos especialistas en 15 especialidades médicas y quirúrgicas en la práctica privada de la medicina en el Reino Unido. Se estima que en el año 2000, el ingreso medio neto de un especialista del NHS con práctica privada fue de 44.000 libras.

Los hospitales privados de agudos compiten entre ellos del mismo modo que las compañías privadas de seguros lo hacen por incrementar su cuota de mercado. En esta competencia, el sector privado se ha enfocado hacia estrategias de reducción de márgenes comerciales. Se considera poco probable una reacción agresiva por parte del sector privado en la competencia por el tiempo asistencial de los especialistas del NHS.

Palabras clave: sanidad privada, mercado de seguros médicos, retribuciones médicas, especialistas del NHS.

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Introducción

In the National Health Service (NHS) England Plan. A plan for Investment. A Plan for refor", Chapter 8, devoted to "Changes for NHS doctors", declares that that in the future, the NHS pretends to contract newly qualified consultants to work exclusively for the NHS for probably the first seven years of their career, thus increasing the financial rewards to these new consultants. Beyond this, the right to undertake private practice will depend on fulfilling a job plan and the NHS requirements, including satisfactory appraisals.

It has been considered to buy out the bulk of existing private practice, paying extra hours at the "private fee per hour," but that proposal faces the possibility of the NHS entering into a bidding war with the private sector (The NHS Plan, 2002). This paper describes the UK acute private health sector, takes into consideration some limited academic literature on interactions between the NHS and the private sector, and attempts to assess the risks of the private sector trying to respond competitively to the NHS Plan for the Consultant Contract Reform.

1. Size of the private sector

The value of independent acute hospitals and clinics supply in 1999 for acute medical/ surgical inpatient and outpatient labour was £1.548 millions.

Table 1 shows trends on expenditures from acute services and total private medical insurance.

	1992	1993	1994	1995	1996	1997	1998	1999	Average
Value of private acute healthcare market £m	912	975	1.049	1.126	1.176	1.288	1.411	1.548	
Acute market growth %		6,9	7,6	7,3	4,4	9,5	9,5	9,7	7,9
Value of Total private healthcare market £m	1.073	1.154	1.249	1.350	1.427	1.570	1.733	1.915	
Total market growth%		7,5	8,2	8,1	5,7	10,0	10,4	10,5	8,6
% Proportion of acute in total market value	85,0	84,5	84,0	83,4	82,4	82,0	81,4	80,8	82,9
PMI [*] market share £m	1.489	1.584	1.667	1.767	1.931	2.120	2.182	2.317	
PMI* market growth %		6,4	5,2	6,0	9,3	9,8	2,9	6,2	6,5

TABLE 1 TRENDS IN VALUE OF PRIVATE HEALTHCARE AND HEALTH INSURANCE MARKET

* PMI (Private Medical Insurance): this figure needs to be added to the £473m of NHS funding activity and out-of-pocket payments to explain funding of the acute healthcare market value.

Source: Modified by the authors from Laings & Buisson, 2000.



The acute elective sector is by far the largest component (81%) of all private medical care and the one with the fastest growth.

This paper will now focus on the acute side, where there is also the fiercest competition for NHS consultant's time. Fees paid to surgeons, anaesthetists and physicians for private specialist treatment have been estimated at an additional £825 million in 1999. But the proportion of insurers' benefits spent on specialists has declined from 34% in 1988 to 27% in 1999, reflecting tight control of fee levels

1.1 Hospital Beds

In mid-2000 in the UK there were 225 independent acute medical/surgical hospitals

with facilities registered to take in-patients. Their total bed capacity was 9.503.

The independent acute medical/surgical hospital sector is now dominated by five UK hospital operators: General Healthcare Group Ltd (BMI Healthcare), BUPA Hospitals Ltd., Nuffield Nursing Homes Trust Ltd., Community Hospitals Group and Hospital Corporation of America (HCA) International Ltd. Between these five large operator groups they own 149 acute hospitals with a bed capacity of 7.189, that is, 72% of the UK total. The 6th largest operator is British Pregnancy Advisory Service with 9 hospitals, and it has only 211 beds which represent 2,1% of the total bed capacity (Table 2).

TABLE 2
LARGEST ACUTE MEDICAL/SURGICAL HOSPITAL OPERATORS BY NUMBER
OF HOSPITALS AND BEDS

Operator	Hospitals	Beds	Share of beds %
General Healthcare Group Ltd (BMI)	43	2.180	21.8
BUPA Hospitals Ltd.	36	1.810	18.1
Nuffield Nursing Homes Trust Ltd.	41	1.618	16.2
Community Hospitals Group plc	22	826	8.3
HCA International Ltd.	7	755	7.6

Source: Modified by the authors from Laings & Buisson, 2000.

BMI Healthcare (the acute medical/surgical hospital division of General Healthcare Group Ltd) became the UK's largest independent hospital operator following the merger of BMI and Amicus Healthcare Group Ltd.

1.2 Relative Size of the Private Sector

The private hospital sector in the UK is small compared with the NHS provision. From a

per capita perspective, there were 20 private acute beds per 100.000 population in 1997/ 1998 compared with 219 per 100.000 in the acute NHS. The regional distribution of private acute hospitals is heavily skewed towards the South East of England. The acute bed ratio ranged from 38 per 100.000 in parts of London to 8 per 100.000 in Wales.

Acute bed occupancy in the private sector is relatively low -around 49% in 1996/1997- and



has been steadily falling from around 55% a decade ago. In the NHS, the bed occupancy average is over 80%. This partly reflects a shorter length of stay in private sector hospitals, but also the low capacity needed to maintain fast access.

Some 591.755 surgical patients (13,4% of the total surgical patients in the UK) had private funding in 1998 (Williams *et al.*, 2000).

The proportion of UK self-payers among independent hospital admissions increased from 13% in 1992/1993 to 19% in 1997/1998. Over 20% of private healthcare revenue in 1999 was derived from self-paying patients. Self-pay has continued to grow in the last 3 years, stimulated by stronger marketing of private self-pay care among independent hospital groups (William *et al.*, 2000) 6) (Tables 3 and 4).

Provider	1995 £m	share %	1996 £m	share %	1997 £m	share %	1998 £m	share %
General Healthcare Group	198.4	17,3	203.5	16,7	226.3	17,5	338	24,3
BUPA Hospitals	222.3	19,4	232.1	19,1	248.9	19,3	292.4	21,0
Nuffield Nursing Homes Trust Ltd.	138.6	12,1	151.1	12,4	167.2	13,0	195.9	14,1
Community Hospitals Group	50.7	4,4	56.1	4,6	75.5	5,8	85.6	6,2
HCA International Ltd.	87.6	7,6	91.5	7,5	92.7	7,2	104.2	7,5
Total proveedores privados	1.147.9	100	1.215.2	100	1.291.1	100	1.390.5	100

 TABLE 3

 Five largest acute medical/surgical hospital operators' revenue.

Source: Modified by the authors from Laings & Buisson, 2000.

TABLE 4 Five largest acute medical/surgical hospital operators' £/bed rate

Provider	1999 £m	1999 share %	1999 £/bed rate £k
General Healthcare Group Ltd (BMI)	367.6	23,7	168.624
BUPA Hospitals Ltd.	322.1	20,8	177.956
Nuffield Nursing Homes Trust Ltd.	215.4	13,9	133.127
Community Hospitals Group plc	113.9	7,4	137.893
HCA International Ltd.	111.4	7,2	147.550

Source: Estimated from Laing's Healthcare Market Review, Laings & Buisson, 2000.

In the last two years, Bupa has lost the first place as the largest market share's operator, due to the merger of BMI & General, but it still has the highest revenue per hospital bed.

1.3 Private Insurers

The three largest medical insurance companies are Bupa, PPP and WPA. An estimated



6.366.000 persons were covered by private medical insurance by the end of 1999, that is, 10,8% of the UK population. The number

of subscribers fell by 1,1% in that same year (Table 5).

	1995 £m	share %	1996 £m	share %	1997 £m	share %	1998 £m	share %	1999 £m	share %
Bupa	780	44,1	813	42,1	867	40,9	871	39,9	928	40,1
PPP	476	26,9	525	27,2	590	27,8	687	31,5	674	29,1
WPA	88	5,0	95	4,9	96	4,5	96	4,4	107	4,6
BCWA	37	2,1	37	1,9	39	1,8	42	1,9	46	2,0
Others	386	21,8	461	24	528	24,9	486	22,3	562	24,3
Total	1.767	100	1.931	100	2.120	100	2.182	100	2.317	100

 Table 5

 PMI Market share by health insurer

Source: Moddified by the authors from Laings & Buisson, 2000.

Gross margins for aggregate PMI fell slightly from 17,8% in 1998 to 17,5% in 1999.

1.4 Market Share

The private sector's share of elective surgery has not increased over the past decade. It actually dropped slightly between 1992/193 and 1997/8. On the other hand, day cases increased by 69% in the same period, now being 51% of all surgeries performed in independent hospitals (Table 6).

2. Interactions with the national health service (NHS)

The demand volume for private healthcare has always been associated with dissatisfaction due to public supply provided by the NHS. Several authors have studied the factors determining the volume of demand for Private Medical Insurance (PMI) and the relationship between the private and public sectors.



 TABLE 6

 PRIVATE PATIENTS RECEIVING ELECTIVE

 SURGERIES OR PROCEDURES

Year	Total	Privately funded	%
1981	1.660.428	219.558	13,2
1986	2.804.925	415.036	14,8
1992/93	3.745.014	527.274	14,1
1997/98	4.415.334	591.755	13,4

Source: Extracted by the authors from the Department of Health Statistics.

- Besley *et al.* (1996) found a strong relationship between long-term waiting lists and the volume of individually-paid PMI demand, calculating a 2% increase in the probability that an individual would buy private insurance. None of the other variables in the study intended to evaluate NHS quality appears to have a significant impact on insurance-purchasing decisions (Besley *et al.*, 1999).
- McAvinchey *et al.* (1993) studied longterm elasticities. They showed that a

permanent one per cent rise in the waiting-time variable will lead to a long-term decreased demand for NHS acute care of 4,79% and the corresponding cross elasticity will imply a long-term rise of 0,6% in demand for private acute care.

- Propper (2000) found in her study that there was no clear association between the length of waiting lists and the use of either the public or private sectors.
- The higher the value a patient assigns to health care, the less price sensitive the patient becomes, and the less elastic healthcare a product becomes. Propper and Maynard (1989) provided short and long-term price elasticity estimates of -0.6 and -2.55 respectively. The authors argued that in a short-term providers could be aggressive price makers with little risk of losing market share.
- Nevertheless, McAvinchey *et al.* (1993) found that a permanent rise in the average

insurance premium of one per cent will lead to a long-term reduction of 4,26% in the demand for private acute care, and a 0,82% increase in demand for NHS acute care. Long-term cross elasticities estimated by these authors indicated that private and public acute care are substitutes: The movement of NHS patients into private care following a rise in waiting lists (0,60%) is smaller than the transfer of private patients into the NHS following a rise in the average insurance premium (0,82%).

• Tor Iversen (1997) reports that the introduction of a private sector when consultants distribute waiting-list admissions, and when those consultants who work in the public sector are also part-time workers in the private sector, will lead to an increase in the waiting time for treatment in the public sector.

These rather inconclusive findings are summarised in Table 7 below.

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REVIEW OF PUBLISHED ELASTICITIES AND CROSS-ELASTICITIES IN PRIVATE	
AND PUBLIC HEALTHCARE SECTORS	

	Price Elasticity		Cross E	lasticity
Author (Year)	Waiting Times	Price Private Sector	Waiting Times/Private Sector size	Price Private Sector/NHS size
Besley et al. (1999)			0.2	
Blundell et al. (2000)	2.48			
Gravelle H	0.207			
Maynard y Propper (1989)		0.60		
McAvinchey et al. (1993)	0.29-0.68	0.78-0.85	0.60	0.82
Phelps et al. (1987)		0.60		
Propper (2000)	0.026			
Smith (2001)	0.23			

Source: Extracted by the authors from different sources.



We did a simple linear regression in order to evaluate the inconclusive literature regarding how the private sector is associated with treatment in public hospitals. The equation model is the following:

 $Y = \hat{a}_0 + \hat{a}_1 X_1 + \hat{i}$

Y being the market share percent growth for the health care insurance private sector, and X_1 the percent growth for physician fees in the private sector.

The method to calculate the linear regression is the least square ordinary.

The resulting value with an R^2 of 0.747 shows that an increase in the percentage of consultant fees leads to an increase in the market share for private insurance companies. The results are shown in equation 1.

Y (Market growth%) = 4.881 + 0.589 X_1 (Fee's growth%) (1)

In our opinion, this result supports the idea that consultants working in the private sector may influence the market share of private health care insurance companies.

The reactions of market leaders, and Laings & Buissons (2000) commentaries upon those, reflect the uncertainty found in academic literature.

- In an attempt to rebuild margins in 2000, insurers have increased premiums for individual policies in 2000 at similar rates of 1999. Bupa raised prices by an average of 14% at the beginning of 2000 and PPP's premiums increased an average 12%.
- Laings & Buisson (2000) believe that despite an "inelastic" demand for PMI, rising premiums in the last two years has reduced the demand in the personal sector and such tendency among individual

subscribers is likely to continue in the next few years.

Perhaps the safest conclusion we can make is that the price elasticity for PMI is higher in the long-term than the short-term, and that there is probably a weak, inelastic relationship between NHS waiting-time performance and the demand for private sector treatments.

2.1 Other Interactions Between the NHS and the Private Sector

The NHS income from private patients is estimated at £331 millions for 1999/2000. The NHS's share of private patient business decreased from 15,5% in 1997 to 14,7% in 1999. One reason for this is the exclusion of most NHS private patient units (PPU) from insurers' network schemes, especially from Bupas's. The exception is PPP's network. During 2000 the number of Private Patient Units PPUs in the PPP Healthcare network increased along with the network's overall expansion.

In 1997/1998, 10,5% of independent hospital admissions were funded by the NHS, compared to only 5% in 1992/1993.

3. Hospital/insurer relationships

Following Laings & Buisson (2000), the rising trend of customer claims among insured population remains a serious threat to future growth of private medical insurance.

Insurers have focused their cost containment efforts on provider prices charged by hospitals.

• Insurers play an active role in negotiating prices with providers. The problem is that



price negotiations became more sophisticated over time, implying higher transaction costs.

- Insurers use vertical integration in order to restrain provider costs and simultaneously assuring the availability of good quality hospital services (Bupa and PPP Healthcare are the main examples).
- Insurers are developing "network" products by major insurers. If patient referrals could be funnelled into the most efficient and high quality hospitals, then their high fixed-costs could be spread over larger volumes of activity, and resulting unit-cost savings could be shared between the hospital and the insurer. One possible consequence of such strategy could be the closure of several hospitals and the emergence of a larger number of local monopoly cases, which could lead to future higher costs.

In 1999 Bupa reported that 80% of its total patient volume went through hospitals within its network and that its local network product was 15% cheaper than non-network policies. The potential loss to hospitals excluded from the Bupa network would be an average of 10% of their revenue.

PPP Healthcare encouraged customers to choose its network by offering a cash discount claimed to be equal to 15% their premiums for using network hospitals instead of "outsider" hospitals.

4. Specialist/insurer relations

4.1 Individual earnings

The Department commissioned the Inland Revenue to carry out a survey on earnings of hospital consultants in England. Similar surveys have been carried out occasionally, the last one covering the 1993-1994 financial year. Such surveys were put on hold while selfassessment was being introduced, but it is now possible to resume surveys using results from self-assessment forms. This year's results cover the financial year 1998-1999. The survey collected information on earnings, both salaried and private, from a sample of hospital consultants in England. It covers all salaried (Schedule E) and private (Schedule D) earnings. In some cases, the Schedule D total will include some "other" earnings (i.e., not related to medical service). However, as self-assessment provides a description of Schedule D income, there is some information about sources of private income.

A random sample of 1.944 consultants, selected from the Department's Medical and Dental Manpower Census of September 1998, was broken down by age and contract type (full-time, maximum part-time and other part-time). This sample was sent to the Inland Revenue to trace self-assessment records and to obtain details about earnings.

There are some 14.000 private practice consultants in 15 medical and surgical specialities in the UK. The estimated average net private income per NHS consultant in 2000 was £44.000, with a figure of £109.000 for the top tenth. Table 8 also indicates the median and interquartile range.

	TABLE	8	
CONSULTANTS'	PRIVATE	EARNINGS	in 2000

	£
Mean	44.055
Median	26.017
Percentiles 25	7.104
Percentiles 50	26.017
Percentiles 75	60.642

Source: Extracted by the authors from the Department of Health Statistics.



A quarter of NHS consultants hold Maximum Part Time (MPT) contracts; 12% hold Part Time (PT) contracts and 62% hold Full Time (FT) contracts. The Inland Revenue (IR) survey has slightly more (29%) MPT contract-holders and fewer FT (59%) contract-holders.

Some 27% of consultants have zero private sector income. The distribution of net private sector earnings after taxes and expenses is shown in Table 9 below.

	All Consultants	FTs	MPTs	PTs
% Consultants £0 Private Earnings	27	37	3	55
Mean £	51.888	28.820	63.564	41.492
Median £	32.876	12.413	44.886	20.345
Percentile 20 £	9.272	2.968	19.828	3.691
Percentile 50 £	32.876	12.413	44.886	20.345
Percentile 70 £	61.088	30.024	77.016	44.929
Percentile 90 £	123.555	73.360	135.020	111.474

Table 9 Distribution of private sector earnings

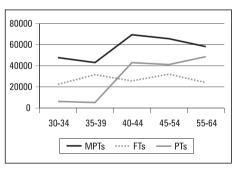
Source: Extracted by the authors from the Department of Health Statistics.

Table 10 and Graph 1 show the distribution of earnings among MPTs, FTs and PTs by age.

TABLE 10Average private earnings by typeof contract and age

	MPTs	FTs	PTs
30-34	47.678	22.353	6.239
35-39	42.994	31.578	5.181
40-44	69.429	25.678	42.918
45-54	65.736	32.093	41.145
55-64	58.154	23.955	48.674

GRAPH 1 Distribution of private earnings by type of contract and age



Source: Extracted by the authors from the Department of Health Statistics.

Source: Extracted by the authors from the Department of Health Statistics.

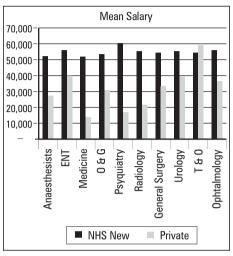
Table 11 and Graph 2 show the means of NHS New appointment starting salary for all specialities; T & O are higher than those for Private sector earnings.





	NHS New	Private	
Specialty	Mean	Mean	%
Anaesthetists	52.276	27.218	48
ENT	55.806	39.763	29
Medicine	51.701	13.630	74
0 & G	53.456	30.833	42
Psychiatry	60.312	16.658	72
Radiology	55.299	21.488	61
General Surgery	54.353	33.419	39
Urology	55.330	39.231	29
Т&О	54.435	58.959	-8
Ophthalmology	55.736	36.325	35

GRAPH 2 MEAN SALARY FOR NHS NEW APPOINTMENT AND PRIVATE SECTOR CONSULTANTS



Source: Extracted by the authors from the Department of Health Statistics.

Source: Extracted by the authors from the Department of Health Statistics.

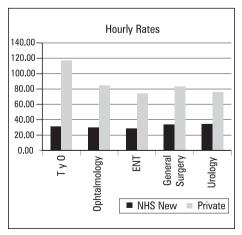
Neverthelss, hourly rate payments are much higher (between percentages) in the private sector than in the NHS New appointments (Table 12 and Graph 3).

TABLE 12 **COMPARED AVERAGE HOURLY RATE PAYMENT** FOR NHS NEW APPOINTMENT AND PRIVATE SECTOR CONSULTANTS

	NHS New	Private	
Specialty	£	£	%
Т & О	31.24	116.52	73
Ophthalmology	29.74	84.24	65
ENT	28.12	74.07	62
General surgery	33.66	83.46	60
Urology	34.17	76.21	55

Source: Extracted by the authors from the Department of Health Statistics.

GRAPH 3 COMPARED AVERAGE HOURLY PAYMENT RATE FOR NHS NEW APPOINTMENT AND PRIVATE SECTOR CONSULTANTS



Source: Extracted by the authors from the Department of Health Statistics.



Insurers have not placed as much attention on specialist fee rates as on hospital prices. Nevertheless, Bupa sets specialist fee limits within its policies, and in recent years its limits have not increased as much as general inflation; this has given rise to criticism from specialists (Monopoly and Mergers Comission, 1993) (Table 13).

 TABLE 13

 Relation between consultants' private fees and private market value

	1992	1993	1994	1995	1996	199 7	1998	1999	Promed.
Value of private acute healthcare market	912	975	1.049	1.126	1.176	1.288	1.411	1.548	
Market growth %		6,9	7,6	7,3	4,4	9,5	9,5	9,7	7,9
% Proportion of fees on market value	52,0	49,9	47,9	46,1	45,2	44,5	43,2	43,1	46,5
% Growth of fee participation in market value		-4,0	-4,1	-3,6	-2,1	-1,6	-2,8	-0,3	-2,6
Consultant fees	474	487	502	520	532	573	610	667	
% Fee growth		2,6	3,2	3,5	2,3	7,7	6,5	9,4	5,0

Source: Extracted by the authors from Laing's Healthcare Market Review 2000-2001.

After comparing the data in Table 12 with the that of the private sector in Table 6 it appears that cost per operation has decreased during the period 1992/1993 to 1997/1998.

In April 1997 Bupa seemed to try a new strategy contrary to its Consultant Partnership scheme. Bupa offers consultants a 5% fee bonus on referrals to BUPA's network hospitals.

In July 2000, Bupa changes again its scheme, offering consultants a 10% fee bonus to attract more of them to its scheme, lifting the restriction to treat patients in one of Bupas's network hospitals in order to claim the bonus. By September 2000, about 6.300 of the UK's 20.000 private practice consultants had signed up to Bupas's Partnership.

5. Competitive analysis

The private health care market is complex and quite concentrated. The Herfindhof hospital index is 0.248 and the Herfindhof insurance index is 0.454, but the private sector is only less than 1/10 the size of the NHS. Within the acute sector, privately-owned hospitals compete with each other for business in the same way as private insurance companies do for large, stable insured populations. Out-of-pocket patients are attracted to private hospitals and NHS private units. The NHS provides 15% of the total inpatient private activity including half of out-of-pocket private sector patients. The NHS also funds 10,5% of the private inpatient activity, pays full training costs for consultants, provides emergency care in private hospitals if things go wrong, and in the future will keep appraisal and validation



materials on each consultant. The recent agreement with the private sector (which they welcomed) was an attempt to strengthen mutually-beneficial trade between both sectors, rather than engage in competition.

The NHS also has an advantage in terms of employing consultants. The premium marginal rates paid to consultants for working in the private sector probably reflects the preference among consultants for a safe employer that offers retirement benefits over a competitive fee. In the short-term, if the private sector began competing for consultant time in detriment of the NHS, the NHS could increase its level of short-term bonuses, impose more stringent conditions upon its consultants and begin recruiting consultants from overseas. In the long-term, it can increase medical school intake or change hospital doctor skill requirements.

Cross-price elasticity between the private sector and the NHS is 0.82. In other words, a 1% higher premium will lead to a return of 0,82% of patients to the NHS. This is greater than the 0,6% of patients who would switch from the NHS to the private sector following a rise in NHS waiting-times. An aggressive policy by the private sector in terms of recruiting full-time consultants, financed by an increase in premiums, would be counter productive.

Return of investment analysis (ROI) shows that there are two possible strategies to increase profits in a company. First, to increase the rotation rate of assets, reducing them or increasing sales and number of services. The second possible strategy is to increase the margin rate, based upon a reduction in operational costs or increasing prices.

The first strategy is difficult for the private sector. Trying to reduce "over capacity" (around 50% nowadays) might increase average waiting-times. Concentrating assets in the most efficient providers may also reduce geographical accessibility.

Increasing the market size is also difficult for the private sector. Its competitor for elective surgery is the NHS. Following several authors, the NHS faces a low price elasticity (price elasticity for the NHS is assumed to be waiting-times). In other words, longer NHS waiting-times will not necessarily decrease NHS demand. It also faces a low cross price elasticity between public and private sectors. In other words, longer NHS waiting times will not necessarily increase the demand in the private sector.

Moreover, Propper (2000), in her study on demand for private health care in the U.K., found evidence that there is a tendency for individuals to re-use the sector they previously used (past NHS or past private use).

Thus, we state the hypothesis by which the private sector is focused on margin rate strategies:

- Last year it increased premiums by 12% and, despite private insurance being price inelastic, it still lost 1,1% of its customers. Cross price elasticity between the Private Sector and the NHS is 0.82. In other words, 1% higher premiums will lead to a return to the NHS for 0,82% of patients. This is greater than the 0,6% of patients who switch from the NHS to the Private Sector following a rise in NHS waitingtimes. Consequently, an aggressive policy by the Private Sector for recruiting fulltime consultants, financed by increased premiums, will cause an even larger return of patients to the NHS.
- 2. It is trying to keep down costs in order to maintain a low growth level due to: negotiation of cost containment contracts (with transaction costs compensated by



hospital cost savings), development of hospital networks, implementation of vertical integration and avoidance of increasing consultant fees.

ROI analysis, applying the Dupont formula for two independent hospital groups (General Healthcare Group and Community Hospitals Group) shown in Table 14 confirms cost containment strategies, showing that companies are more focused on maintaining margins through cost containment or increasing premiums, than on increasing their market size.

6. Risk of private sector spoiling tactics outbidding nhs for consultant time

Following several authors, there is a low cross elasticity between NHS waiting times and private sector demand. Thus it is unlikely that reduced NHS waiting times will trigger an aggressive response from the private sector. Also, the consultant contract reform does not aim at reducing the number of hours of consultant time supplied to the private sector but to make more explicit arrangements and perhaps reduce the number of consultants supplying those hours.

If the private sector perceives shorter NHS waiting times as a challenge to their existence, they may want to plan a short-term "war for consultant time." We consider this unlikely to happen.

An aggressive response from the private sector would mean employing private specialists full-time (Laing, 1992). The private sector would face five problems under that strategy:

1. Doctors prefer to work for the NHS for reasons of professional status, loyalty, and the advantage of working for the NHS with

TABLE 14ROI in 1999 of GHG and CHGINDEPENDENT HOSPITAL GROUPS

	General Healthcare Group	Community Hospitals Group		
Margin rate %	5,35	15,65		
Assets rotation				
rate	0,51	0,46		
ROI %	2,7	7,2		

Source: Laings & Buisson, 2000.

its on-site facilities and staff, being able to deal with any emergencies, rather than working for the private sector. This applies not only to current PPU but also to the future NHS payment scheme, explaining why doctors are choosing to work for the NHS PPUs instead of working more hours for the private sector.

- 2. Specialists who have a consultant position at the NHS virtually have a monopoly over private practice because of the professionally-established referral chain from GPs to consultants. This monopoly is strengthened by the fact that doctors themselves manage the waiting list, thus they can induce demand for the private sector (McAvinchey y Yannopoulos, 1993).
- 3. There are no scale economies nor scope economies for independent hospital size. A joint study between the Nuffield Institute for Health at the University of Leeds and the Centre for Reviews and Dissemination at the University of York found that moderate size hospitals between 200 and 300 beds exhibited scale economies. The study also found that large hospitals with more than 600 beds, and smalles ones with less than 100, displayed scale diseconomies. For the top independent hospital providers (BMI,



BUPA and Nuffield Hospitals), the average size is 46.7 beds per hospital. Evaluating this evidence, we could expect scale diseconomies rather than scale economies in the independent hospital sector. The study also suggests that such evidence did not prove the existence of scope economies for the average hospital in the long-term (Nuffield Institute for Health, 1996; Aletras *et al.*, 1997).

- 4. The private sector has a supply constraint problem. It only supplies 0.2 beds per 1.000 population and even at full bed occupancy this means the private sector can provide, at most, only two tenths of the total acute bed capacity that the NHS provides. Moreover, the private sector bed supply has a strong regional skew towards SE England, thus there is a lack of supply in the rest of the country. Therefore, the physical limitation of resources limits the number of patients that can be treated.
- 5. If the private sector would change its policy of using part-time consultants for recruiting full-time personnel, this would mean paying the highest hourly rate because full-time consultants would not accept current average hourly rates. Laing (1992) estimated full-time equivalent earnings for specialists in private practice would have to be £300.000-340.000 (today, that figure might be closer to £500.000). If BUPA, which presently has 6.350 consultants working part-time, would pay the lowest full-time rate, they would instead use 1.300 full-time specialists; however, such new strategy would cost Bupa 150% more than its present policy.

Conclusions

There is evidence for the hypothesis that consultants working both in the public and private sector may influence the growth of the insurance market share; current literature suggests this would be achieved by increasing waiting-times in the public sector hospitals.

Due to this hypothesis, an appropriate strategy for the NHS to gain consultant effort and time devoted to the NHS would be to buy extra hours at "private hourly fee."

The fear of the NHS about generating a bidding war with the private sector is not very realistic. Our analysis suggests it is unlikely that the private sector will respond aggressively to any of these policies. If they tried to compensate a change of activity by employing full-time consultants and transferring the higher costs of this strategy to insurance policy premiums, they would face very high salary costs, supply constraint problems and a potentially larger return of consultants from the private sector to the NHS.

Insurers are competing by means of vertical integration in order to contain provider costs, and developing "network" products. The possible consequence of such strategy could be the closure of some hospitals and the emergence of local monopoly cases. The risk is that consumers would have to face higher costs in the future.

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ESPECIALIZACIÓN BORDERENCIÓN BO

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